

REMARKS

Claims 1-23 are pending in the application. By this Amendment, claims 1-4 and 8 are amended and claims 17-23 are added.

The drawing figures are objected to under 37 CFR 1.83 (a). A Request for Approval of Drawing Corrections proposing red-line corrections to drawing figures is filed herewith to obviate the objection. Withdrawal of the objection is respectfully requested.

The specification is objected to because of informalities. The specification is amended to obviate the objection. Withdrawal of the objection is respectfully requested.

The drawings are objected to because they fail to comply with 37 C.F.R. 1.84 (p)(5)). A Request for Approval of Drawing Corrections proposing red-line corrections to drawing figures is filed herewith to obviate the objection. Withdrawal of the objection is respectfully requested.

The Office Action objects to the drawings because Figures 5a-5c and 6a-6c should be designated by a legend such as "Prior Art". A Request for Approval of Drawing Corrections proposing red-line corrections to drawing figures is filed herewith to obviate the objection. Withdrawal of the objection is respectfully requested.

The Office Action also objects to the drawing figures under 37 C.F.R. 1.83 (a). Claim 8 is amended as shown above by changing "metal" to "resin" to obviate the objection.

The Office Action states that the drawings do not show the limitation of the chassis as a whole being formed of a metal material which is one of the alternatives claimed in claim 9. It is respectfully submitted that a metal chassis as a whole is formed of a metal material is shown in Figure 4a. Further, it is respectfully submitted that the vibration preventing damper in the other embodiments is integrally connected at a vibration preventing damper forming portion fabricated from resin. Thus, it is respectfully submitted that one of ordinary skill in the art would appreciate that the embodiment in Figure 4a would include a completely metal chassis because of the arrangement of the resin portion 21 connected to it to facilitate connection of the other

components of the vibration preventing damper.

Withdrawal of the objection is respectfully requested.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph. The claims are amended to obviate the rejection. Withdrawal of the rejection is respectfully requested.

Claim 1 is rejected under 35 U.S.C. 103(a) as unpatentable over prior art Figure 6c. The rejection is respectfully traversed.

Figure 6c teaches that a vibration preventing damper 5 is mounted on a mechanical chassis 3 using a mounting screw.

Claim 1 is directed to a vibration preventing damper forming method that includes the step of mounting a damper housing to a vibration damper forming portion of either a casing or a mechanical chassis by integrally forming a vibration preventing damper with either the casing or the mechanical chassis without using mechanical fasteners.

It is respectfully submitted that one of ordinary skill in the art would not be motivated to modify the features of the applied art to arrive at the claimed invention. In particular, the applied art specifically teaches mounting a damper housing to either a casing or a mechanical chassis using a mechanical fastener such as a screw. By contrast, the claimed invention recites that the vibration preventing damper is integrally formed with either a casing or a mechanical chassis without using mechanical fasteners. As result, it is respectfully submitted that claim 1 is allowable over the applied art.

Withdrawal of the rejection is respectfully requested.

Claims 2, 4 and 14 are rejected under 35 U.S.C. 103(a) as unpatentable over prior art Figure 6c in view of Suzuki (U.S. Patent No. 4,158,450) and Kuhn (U.S. Patent No. 5,347,507). The rejection is respectfully traversed.

Suzuki teaches a support assembly that includes a metal base plate having a circular hole formed therein and a synthetic resin mounting member molded through the circular hole and including a support portion molded against one surface of the base plate.

Kuhn teaches an electronic apparatus, such as a compact disc player, that includes resilient elements for preventing shock and vibration from being transmitted from a housing to a chassis or a drive mechanism.

Claim 2 is directed to a mechanical chassis that includes a vibration preventing damper and a chassis. Claim 2 recites that the vibration preventing damper is formed integrally with the chassis without using mechanical fasteners.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claim 2. Specifically, the applied art fails to teach a vibration preventing damper formed integrally with a chassis without using mechanical fasteners. As a result, one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. Thus, it is respectfully submitted that claim 2 is allowable over the applied art.

Claims 4 and 14 depend from claim 2 and include all of the features of claim 2. Thus, the dependent claims are allowable at least for the reasons claim 2 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

Claim 9 is rejected under 35 U.S.C. 103(a) as unpatentable over prior art Figure 6c in view of Suzuki and Kuhn as applied to claims 1, 2, 4 and 14 and further in view of Ito (U.S. Patent No. 6,310,853). The rejection is respectfully traversed.

Ito teaches a recording medium loading apparatus. The Examiner cites this reference to show that a chassis as a whole is formed of a resin material or a metal material.

As discussed above, claim 2 is allowable over the prior art Figure, Suzuki and Kuhn. Ito fails to cure the deficiencies of these references. Thus, claim 2 is allowable over the combination of these references. Claim 9 depends from claim 2 and includes all of the features of claim 2. Thus, it is respectfully submitted that claim 9 is allowable at least for the reasons claim 2 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

Claims 1, 2, 3, 5, 7, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as unpatentable over Furukawa et al. (U.S. Patent No. 6,324,153) in view of prior art Figure 6c.

Furukawa teaches a disc device having vibration absorbers for use in a small-height structure.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claims 1 and 2. Specifically, none of the applied art teaches or suggests that the vibration preventing damper is integrally formed with either a casing or a mechanical chassis without using mechanical fasteners as recited in claim 1. Further, none of the applied art teaches or suggests a vibration preventing damper formed integrally with a chassis without using mechanical fasteners as recited in claim 2. Thus, it is respectfully submitted that one of ordinary skill in the art would not be motivated to combine the features of the applied art because such combination would not result in the claimed invention. Thus, it is respectfully submitted that claims 1 and 2 are allowable over the applied art.

Claims 3, 5, 7, 9, 10 and 12 depend from claim 2 and include all of the features of claim 2. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reasons claim 2 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

Claims 6, 8, 11 and 13 are rejected under 35 U.S.C. 103(a) as unpatentable over Furukawa in view of prior art Figure 6c as applied to claims 1 and 2 and further in view of Suzuki. The rejection is respectfully traversed.

It is respectfully submitted that claim 2 is allowable over Furukawa and prior art Figure 6c as discussed above. Suzuki fails to cure the deficiencies of these references. As a result, it is respectfully submitted that claim 2 is allowable over the combination of these references.

Claims 6, 8, 11 and 13 depend from claim 2 and include all of the features of claim 2. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reasons claim 2 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

Also, newly-added claims 17-23 also include features not shown in the applied art.

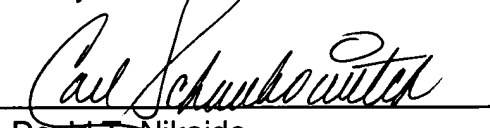
In view of the foregoing, reconsideration of the application and allowance of the pending claims are respectfully requested. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

Respectfully submitted,

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Enclosure(s): Appendix I (Marked-Up Version of Amended Specification)
 Appendix II (Marked-Up Version of Amended Claims)
 Request for Approval of Drawing Corrections
 Information Disclosure Statement
 Form PTO/SB/08A (listing and enclosing eight (8) references)

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APPENDIX I**(MARKED-UP VERSION OF AMENDED SPECIFICATION)**

On Page 2, Paragraph 2:

Further, the device shown in Figs. 6A to 6C is of a type in which viscous fluid is sealed in the interior and the vibration is attenuated by utilizing the viscous fluid resistance of the viscous fluid. This vibration preventing damper 5 has a bottomed cylindrical agitating sleeve portion 5a and is provided with a damper housing 5e consisting of an elastic wall portion 5b to elastically deform in the three-dimensional directions to suppress the floating movement of the agitating sleeve portion 5a and to expand so as to surround the agitating sleeve portion 5a and a circumferential all portion 5d made of a hard resin, fixed at one end to an elastic wall portion 5b and having an outward flange 5c at the other end. A viscous fluid 5f is filled in the interior of the damper housing 5c and sealed by fixing a lid member 5g to the damper housing 5e to form the vibration preventing damper 5. Then, when the vibration preventing damper 5 is mounted on the mechanical chassis 3, a support rod ~~3b-3d~~ projecting from the mechanical chassis 3 is inserted into the agitating sleeve portion 5a and held thereat. Further, when the vibration preventing damper 5 is mounted on the casing 1, a mounting screw N₂ is inserted into a screw hole formed in the lid member 5g and then screwed to the casing 1. Thus, the mechanical chassis 3 are elastically supported at a plurality of positions by the vibration preventing dampers 5 within the interior of the casing 1 in the vibration preventing manner.

On Page 22, Paragraph 1:

A damper housing 22 is formed of an elastic wall portion 22a made of a butyl rubber and an outward flange ~~22b-22d~~ is fixed to a lower surface 21a of the ~~rein-resin~~ resin portion 21 through vulcanization bonding. Further, a lid member 23 is fixed with adhesives to an upper surface 21b of the resin portion 21, whereby under the condition that the viscous fluid 24 is filled in the interior, the interior of the damper housing 22 is hermetically sealed and the vibration preventing damper 20 is formed integrally with the chassis 19.

APPENDIX II

(MARKED-UP VERSION OF AMENDED CLAIMS)

1. (Amended) A vibration preventing damper forming method for supporting in a vibration proof manner a mechanical chassis provided with a non-contact reading mechanism for a ~~disc-like~~disc recording medium in a floating manner within a casing comprising the steps of:

forming, of a resin, an opening side end portion of a damper housing having a holder portion in the form of a container opened at one end for holding a support shaft provided in one of the casing and a mechanical chassis and an elastic wall portion that may reduce a floating movement of a support shaft due to elastic deformation in three-dimensional directions and a vibration preventing damper forming portion of any one of the casing and the mechanical chassis, mounting the damper housing to said vibration damper forming portion by ~~the fixture of the resin to thereby~~ integrally ~~form-forming~~ the vibration preventing damper with the any one of the casing and the mechanical chassis without using mechanical fasteners.

2. (Amended) A mechanical chassis including a non-contact reading mechanism for a ~~disc-like~~disc recording medium and ~~said a~~ vibration preventing damper ~~formed in accordance with the forming method as recited in claim 1 attached~~ on a chassis supported in a floating condition through the vibration preventing damper within ~~the a~~ casing, further comprising a resin portion at the vibration preventing damper forming a portion of the chassis, wherein ~~the an~~ opening side end portion made of a resin material of the damper housing provided with ~~the a~~ holder portion in ~~the a~~ form of ~~the a~~ container opened at one end for inserting ~~the a~~ support shaft provided in the casing and an elastic wall portion for reducing ~~the~~ floating movement of the support shaft due to elastic deformation in three-dimensional directions is fixed to said resin portion, and said vibration preventing damper is formed integrally with said chassis without using mechanical fasteners.

3. (Amended) A mechanical chassis according to claim 2, wherein a ~~through~~ hole for communicating air between an inside and an outside of the vibration

preventing damper is formed in any portion of the vibration preventing damper forming portion in at least one of the vibration preventing damper and the chassis.

4. (Amended) A mechanical chassis according to claim 2, wherein the holder portion of the damper housing is formed as a bottomed agitating shaft portion for holding the inserted support shaft provided in the casing and viscous fluid for giving an agitating resistance due to viscous fluidization to the agitating shaft portion that moves in accordance with the movement of the support shaft is provided within an interior of the vibration preventing damper.

8. (Amended) A mechanical chassis according to any one of claims 2 to 4, wherein a through hole through which the damper housing may be inserted is provided in the vibration preventing damper forming portion in one of a ~~metal~~-resin portion of a chassis and a metal chassis, a resin portion of said through hole is provided in a hole edge of said through hole, an outward flange is provided in the damper housing,

under the condition that the one side surface of the outward flange comes in contact with one of a hole edge of the through hole and the resin portion on one side surface of the chassis, the damper housing is fixed to the resin portion and a lid member made of a resin material for closing the opening side end portion of the damper housing is fixed to the outer side surface of the outward flange.